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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,190	04/19/2007	Hiromi Inagaki	OCB-239-A	8992
21828 7590 03/04/2011 CARRIER BLACKMAN AND ASSOCIATES 43440 WEST TEN MILE ROAD EATON CENTER NOVI, MI 48375				
EXAMINER BURCH, MELODY M				
ART UNIT 3657		PAPER NUMBER		
NOTIFICATION DATE 03/04/2011		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/593,190

Applicant(s)

INAGAKI ET AL.

Examiner

Melody M. Burch

Art Unit

3657

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 4 is/are rejected.
- 7) ☒ Claim(s) 2 and 5-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed 9/19/06 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because some of the references fail to include the inventor(s) and issue date as required by 37 CFR 1.98 (b)(1). It has been placed in the application file, but some of the information referred to therein (particularly, some of the US references) has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4116307 to Reinecke.

Re: claims 1, 3, and 4. Reinecke shows in figure 3 a parking brake system comprising: a parking piston (83) slidably fitted into a casing (82a, 82b) so that a parking brake state can be obtained by forward movement in response to a parking control fluid pressure acting on a rear face side of the parking piston; a lock mechanism provided within the casing to the rear of the parking piston (83) so as to automatically lock in response to forward movement of the parking piston in order to mechanically lock the parking piston at a forward position and unlock in response to a parking release control fluid pressure acting on the lock mechanism; a fluid pressure source (connected to element 89); and fluid pressure control means (89) for controlling a fluid pressure generated by the fluid pressure source so that the parking control fluid pressure and the parking release control fluid pressure can be obtained; the lock mechanism comprising a lock piston (92) that is slidably fitted into the casing to the rear of the parking piston so that at least when the parking piston moves forward a forward urging force acts on the lock piston and that is arranged such that a parking release control pressure can act on the lock piston toward the rear, a cylindrical retaining tube (the rightmost o-ring on 83) that is integrally and coaxially connected to a rear part of the parking piston, at least one sphere (90) that are retained at least one position in the peripheral direction of the retaining tube so as to be movable in a direction along the radial direction of the retaining tube, and an insertion shaft (or integrally connected shaft portion to the left of 92) that is connected integrally to the front end of the lock piston so as to be axially relatively movably inserted into the retaining tube in order to sandwich the at least one sphere between the insertion shaft and the inner face of the casing while contacting the

at least one sphere via intervening element from the inside of the retaining tube; the casing and the insertion shaft being formed so as to position the at least one sphere radially inward when the parking piston is at a retreat limit and position the sphere radially outward when the lock piston moves to a forward position in response to forward movement of the parking piston from the retreat limit, a plurality of guide grooves (92a) extending in the axial direction of the insertion shaft being provided on the outer face of the insertion shaft, the guide grooves having a concavely curved cross-sectional shape with a diameter that is equal to or larger than the diameter of the at least one sphere so that part of each of the at least one sphere is rollably fitted into the guide groove, and the casing having provided on the inner face a restricting step or incline of 82b that is capable of abutting, from the rear, against the sphere pushed radially outward by the insertion shaft when the lock piston is at the forward position.

With regards to the plurality of spheres, in *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) the court held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

In *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) the court held that claims directed to a device which read on the prior art with the exception of the position of a component were unpatentable where switching the position of the component would not modify the operation of the device. In this case the spheres would move radially inward and/or outward along the guide groove whether the guide grooves were positioned on the inner surface of the hole or the outer surface of the insertion shaft.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7651175 to Inagaki in view of US Patent 4116307 to Reinecke. Claim 1 of the instant application and claim 1 of the '175 patent recite similar limitations except that the '175 patent claims that the guide grooves are on the inner face of the large diameter hole whereas the instant invention recites that the guide grooves are on the outer face of the insertion shaft.

In *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) the court held that claims directed to a device which read on the prior art with the exception of the position of a component were unpatentable where switching the position of the component would not modify the operation of the device. In this case the spheres would move radially inward and/or outward along the guide groove whether the guide grooves were positioned on the inner surface of the hole or the outer surface of the insertion shaft.

Allowable Subject Matter

7. Claims 2 and 5-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments filed 12/16/10 have been fully considered but they are not persuasive.

Applicant argues that Reinecke fails to disclose a cylindrical retaining tube that is integrally and coaxially connected to a rear part of the parking piston and spheres

retained around the retaining tube wherein an insertion shaft connected to the front end of the lock piston is relatively movably inserted into the retaining tube in order to sandwich the spheres between the insertion shaft and the inner face of the casing. Examiner notes that Reinecke, as modified, discloses a cylindrical retaining tube or rightmost seal on the piston 83 that is integrally and coaxially connected to a rear part of the parking piston 83 and spheres (taught by Reinecke in view of the teachings of *In re Harza* and in view of the fact that only half of the cross-section is shown as evident from the presence of only half of spring 91 suggesting the existence of another half including the remaining portions of spring 91 and another sphere 90) retained around or in the area of the retaining tube wherein an insertion shaft or left portion of element 92 connected to the front end of the lock piston 92 is relatively movably inserted into the retaining tube in order to sandwich the spheres between the insertion shaft and the inner face of the casing 82a, 82b. Examiner acknowledges; however, that the cylindrical retaining tube of Reinecke is a *distinct* element from the parking piston that is integrally connected to the rear part of the parking piston.

In response to Applicant's argument that Reinecke fails to teach the guide grooves, Examiner disagrees. Examiner maintains that the guide grooves are recited as being provided on the outer face of the insertion shaft, extending in the axial direction of the insertion shaft and being concavely curved and arranged such that the at least one sphere is rollably fitted into the guide groove. Examiner maintains that the guide groove or the concave cooperating surface portions of 92a into which sphere 90 rollably fits is located on the outer surface of the insertion shaft and extends in an axial direction

as shown and as claimed. It is unclear how Applicant can argue that the rejection of this limitation using Reinecke is based on improper hindsight.

The double patenting rejection has been maintained first because Reinecke, in fact, shows the groove on the outer face of the insertion shaft as explained above and second because the same reason given for placing the grooves on the inner face of the surrounding hole is the same reason given for placing the grooves on the outer face of the insertion shaft. See paragraph [0011] of the instant invention. Accordingly, changing the position of the guide grooves from the inner face of the surrounding hole to the outer face of the insertion shaft as the double patenting rejection suggests would not modify the operation of the Inagaki parking brake as Applicant suggests.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb
February 28, 2011

/Melody M. Burch/
Primary Examiner, Art Unit 3657